

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A waveform equalizer comprising:
a calculation circuit
that permits free setting of a boost factor by which a gain, in a predetermined frequency range, for an input signal to the waveform equalizer is adjusted and that adjusts the gain for the input signal by varying the boost factor; and
an all-pass filter
that is connected to a stage preceding or following the calculation circuit,
that has a first conductance amplifier and a second conductance amplifier, and
that adjusts and thereby corrects a group delay characteristic of the input signal by varying a conductance of at least one of the first and second conductance amplifiers.
2. (Original) The waveform equalizer of claim 1, wherein
the all-pass filter further has
a differentiator that is connected between input and output circuits of the first conductance amplifier and that includes a first capacitor and
a second capacitor that is connected between an input side of the first conductance amplifier and an output side of the second conductance amplifier.
3. (Original) The waveform equalizer of claim 2, wherein
an input voltage to the all-pass filter is fed to one input terminal of the first

conductance amplifier,
a voltage applied to an output terminal of the first conductance amplifier is fed to one input terminal of the second conductance amplifier,
a voltage applied to an output terminal of the second conductance amplifier, which voltage corresponds to an output voltage of the all-pass filter, is fed to another input terminal of the first conductance amplifier and to another input terminal of the second conductance amplifier, and
the input voltage to the all-pass filter and the voltage applied to the output terminal of the first conductance amplifier have phases inverted relative to each other.

4. (Currently Amended) The waveform equalizer of claim 2 ~~one of claims 2 and 3~~, wherein the all-pass filter

keeps the conductance of the first conductance amplifier constant and makes the conductance of the second conductance amplifier variable, and,
by varying the conductance of the second conductance amplifier, adjusts and thereby corrects the group delay characteristic of the input signal while keeping a group delay of the input signal in a direct-current range constant.

5. (Currently Amended) The waveform equalizer of claim 2 ~~one of claims 2 and 3~~, wherein the all-pass filter

makes the conductance of the first conductance amplifier variable, and,
by varying the conductance of the first conductance amplifier, varies a frequency range in which the group delay characteristic of the input signal is corrected.

6. (Currently Amended) The waveform equalizer of claim 1 ~~one of claims 1 to 3~~, wherein the calculation circuit is built as an equi-ripple filter.

7. (Currently Amended) An information reproducing apparatus comprising:

a detector that detects information recorded on a recording medium and that then converts the detected information into an electrical signal;
an waveform equalizer that receives as an input signal thereto the electrical signal; and
a processing circuit that processes an output from the waveform equalizer,
wherein
the waveform equalizer is the waveform equalizer of one of claim 1 ~~claims 1 to 3~~, and
the information reproducing apparatus further comprises a controller
that sets the boost factor and
that sets whichever of the conductances of the first and second conductance amplifiers is made variable.